

Listing and Amendments to the Claims

This listing of Claims will replace all previous listings of Claims:

1. (currently amended) A method for controlling access by a user terminal to a communications network comprising the steps of:
 - receiving from the user terminal a request to access the communications network;
 - transmitting to the user terminal an identity request message;
 - receiving from the user terminal a response to the identity request message;
 - determining whether the user terminal uses a predetermined authentication protocol in response to the response to the identity request message;
 - selecting said predetermined authentication protocol if the user terminal uses said predetermined authentication protocol; and
 - selecting an authentication mechanism compatible with the user terminal upon determining the user terminal is not compatible with the predetermined authentication protocol, for allowing user terminal access to the communications network.
2. (currently amended) The method according to claim 1, wherein the ~~user terminal comprises a mobile terminal and the~~ communications network comprises a wireless local area network ~~wireless local area network~~ that complies with the IEEE 802.11 standards.
3. (currently amended) The method according to claim 2, ~~wherein the~~ selecting step includes including selecting an appropriate authentication server coupled to the wireless local area network in response to the determination.
4. (currently amended) A method for controlling ~~mobile user~~ terminal access to a wireless local area network, comprising the steps of:
 - receiving from ~~the mobile~~ a user terminal a request to access the wireless local area network;
 - transmitting to the ~~mobile user~~ terminal an identity request message;

receiving from the mobile user terminal a response to the identity request message;

determining whether the mobile user terminal is IEEE 802.1x compliant in response to the response to the identity request message;

selecting an authenticating mechanism utilizing IEEE 802.1x if said user terminal is IEEE 802.1x compliant; and

selecting an authentication mechanism, compatible with the mobile user terminal, in response to a determination that the mobile user terminal is not IEEE 802.1x compliant, for allowing user mobile terminal access to the wireless local area network.

5. (currently amended) The method according to claim 4, further comprising the steps of, if the mobile user terminal is IEEE 802.1x compliant, transmitting an authentication request to an authentication server and receiving an authentication response utilizing the IEEE 802.1x protocol, and controlling mobile user terminal access to the wireless local area network in response to the authentication response.

6. (currently amended) The method according to claim 4, further comprising the steps of, if the mobile user terminal is not IEEE 802.1x compliant, redirecting an authentication request to an HTTP server for utilizing a browser based authentication protocol.

7. (original) The method according to claim 6, further comprising the step of configuring a packet filtering module to redirect the authentication request to the HTTP server.

8. (previously presented) The method according to claim 7, further comprising the step of maintaining state information in the wireless local area network for use by the packet filtering module and the HTTP server.

9. (currently amended) The method according to claim 8, wherein the state information includes one of a first state indicative of ongoing authentication

process, a second state indicative of authentication failure, a third state indicative of authentication success, and a fourth state indicative of a ~~non~~ IEEE 802.1x non-compliant mobile user terminal.

10. (currently amended) An access point in communication with a user terminal device in a wireless local area network, comprising:

a means to determine ~~whether~~ if the user terminal device utilizes an IEEE 802.1x protocol;

mean for employing the IEEE 802.1x protocol in said access point, if said user terminal utilizes the IEEE 802.1x protocol; and,

means for employing an authentication means compatible with the user terminal if the user terminal does not utilize said employs a protocol other than;
~~then the access point employing an authentication means compatible with the terminal device, otherwise the access point employing an~~ the IEEE 802.1x protocol.

11. (currently amended) The access point in claim 10, wherein the means to determine includes means for communicating to the user terminal device a Request-Identity extensible authentication protocol packet and if the ~~mobile user~~ terminal utilizes the IEEE 802.1x protocol the access point receives a Response-Identity extensible authentication protocol packet.

12. (currently amended) The access point in claim 11, further comprises ~~the~~ means to configure an internet protocol packet filtering means to redirect the ~~device~~ user terminal ~~HTTP~~ request to a local server if the user terminal device does not utilize said IEEE 802.1x protocol.

13. (currently amended) The access point in claim 10, further comprises means to communicate IEEE 802.1x protocol exchanges and means to establish internet protocol packet filtering through an internet protocol packet filter module means and state information ~~for the HTTP server to control the user terminal device access during and after an~~ IEEE 802.1x based authentication process if the access point detects that the user terminal device is an IEEE 802.1x

client protocol compliant.

14. (currently amended) A method for controlling access by a user terminal device in a wireless local area network by determining whether the user terminal device utilizes an IEEE 802.1x protocol comprising the steps of:

an access point communicating to the ~~mobile user~~ terminal a request to identify, and if the user terminal device utilizes ~~an the~~ IEEE 802.1x protocol, acknowledging the request to identify, otherwise the access point determining that the user terminal is not IEEE 802.1x compliant and selecting an authentication mechanism compatible with the ~~mobile user~~ terminal.

15. (currently amended) The method according to claim 14, wherein the access point determines that the user terminal is not IEEE 802.1x compliant when it does not receive an extensible authentication protocol identity response packet after a timeout value.

16. (currently amended) The method according to claim 15, further comprising the step of the access point detecting that if the user terminal device is not IEEE 802.1x compliant, then configuring an internet protocol packet filter and redirecting a user ~~HTTP~~ request to a local server.

17. (currently amended) The method according to claim 16, further comprising the step of the local server communicating to the user terminal device information specifically related to a browser based authentication protocol.

18. (currently amended) The method according to claim 17, further comprising the step of the access point transitioning to a state₁ if the user terminal device utilizes the IEEE 802.1x protocol₁ that indicates that the user terminal device is IEEE 802.1x compliant and thereafter processing all communication utilizing the IEEE 802.1x protocol.

19. (currently amended) The method according to claim 17, further comprising the step of the access point transitioning to a state corresponding to

browser based authentication protocol if ~~the~~ authentication ~~process~~ fails.

20. (currently amended) The method according to claim 14, further comprising the step of the access point transitioning to a state corresponding to browser based authentication protocol if the user terminal device is not IEEE 802.1x compliant.

21. (currently amended) A method for controlling access of a user terminal device in a wireless local area network by determining whether the user terminal device utilizes an IEEE 802.1x protocol, comprising the steps of:

communicating through ~~the~~ an access point to the ~~mobile~~ user terminal a request to identify, and if the user terminal device utilizes an IEEE 802.1x protocol, acknowledging the request to identify, otherwise determining by the access point that the user terminal is not IEEE 802.1x compliant and selecting an authentication mechanism compatible with the user terminal.

22. (currently amended) The method according to claim 21, further comprising the step of determining in the access point that the user terminal is not IEEE 802.1x compliant if ~~it~~ the user terminal does not receive an extensible authentication protocol identity response packet after a preset time.

23. (currently amended) The method according to claim 21, further comprising the step of detecting in the access point ~~that~~ if the user terminal device is not IEEE 802.1x compliant, then configuring an internet protocol packet filter means and redirecting a user ~~HTTP~~ request to a local server.

24. (currently amended) The method according to claim 23, further comprising the step of communicating from the local server to the user terminal device, information specifically related to a browser based authentication protocol.

25. (currently amended) The method according to claim 21, further comprising the step of transitioning to a state₂ in the access point if the user terminal device utilizes the IEEE 802.1x protocol₁ that indicates that the user

terminal device is IEEE 802.1x compliant and thereafter processing all communication utilizing the IEEE 802.1x protocol.

26. (currently amended) The method according to claim 25, further comprising the step of transitioning to a the state in the access point corresponding to browser based authentication protocol if ~~the~~ authentication ~~process~~ fails,

27. (currently amended) The method according to claim 21, further comprising the step of transitioning to a state in the access point corresponding to browser based authentication protocol if the user terminal ~~device~~ is not IEEE 802.1x compliant.